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**REMARKS**

Claims 1-14 and 22-29 are currently pending in the subject application and are presently under consideration. To facilitate examination, a complete listing of the claims in revised amendment format can be found at pages 2-5. No changes have been made thereto.

Favorable reconsideration of the subject patent application is respectfully requested in view of the comments provided below.

**I. Rejection of Claims 1-14 and 22-29 Under 35 U.S.C. § 103(a)**

Claims 1-14 and 22-29 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Tjandrasuwita (U.S. 6,198,469) in view of Reddy, *et al.* (U.S. 6,215,459). Withdrawal of this rejection is respectfully requested for at least the following reasons.

Tjandrasuwita and Reddy, *et al.* alone or in combination fail to teach the limitations of independent claims 1 and 22. Furthermore, and assuming *arguendo* that the limitations were taught by the combination of cited references, there is not proper motivation for the combination.

*A prima facie* case of obviousness is established by a showing of three basic criteria. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. *See* MPEP §706.02(j). The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on applicant's disclosure. *See In re Vaack*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

Both claims 1 and 22 recite a *single output* that can provide data to both CRTs and LCDs. Tjandrasuwita discloses two different physical connection points – one for CRTs and one for LCDs. LCDs are connected and receive data from a flat panel interface, while CRTs connect and receive data from a DAC (Digital-to-Analog Converter) that is external to both the controller and the flat panel interface. Reddy, *et al.* discloses a single controller that can provide data to two different displays simultaneously. Thus, Reddy, *et al.* teaches one controller that controls

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*two distinctly connected displays* (e.g., CRT and LCD) thereby allowing switching between images on one display with images on another. Hence, neither Tjandrasuwita nor Reddy, *et al.* teach a *single output* that can provide data to both CRTs and LCDs as claimed.

Moreover, there is not proper motivation to combine Tjandrasuwita and Reddy, *et al.* at least because Reddy, *et al.* teaches away from a single output.

Obviousness can only be established where there is some teaching or suggestion for the purposed modification or combination. *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). Moreover, *a reference that teaches away from the art is a per se demonstration of a lack of prima facie obviousness*. *In re Geisler*, 116 F.3d 1465, 43 USPQ2d 1362 (Fed. Cir. 1997) (emphasis added). A reference may be said to teach away when a person of ordinary skill, upon reading the reference, would be discouraged from following the path set out in the reference, or would be led in a direction divergent from the path that was taken by the applicant. *In re Gurley*, 27 F.3d 551, 553, 31 USPQ2d 1130 (Fed. Cir. 1994); *Tec Air, Inc. v. Denso Mfg. Mich. Inc.*, 192 F.3d 1353, 52 USPQ2d 1294 (Fed. Cir. 1999).

A main objective of Reddy, *et al.* concerns dual displays. In particular, the object is to display images on an external monitor (*i.e.*, *via* external output) while simultaneously displaying different information on an internal display (*i.e.*, *via* internal output) and being able to switch images therebetween. The disclosure of two different displays connected at two different points teaches away from a single output for either CRTs or LCDs as claimed.

Furthermore, the Examiner asserts that it would be obvious to combine Tjandrasuwita and Reddy, *et al.* because doing so would provide "a means of driving displays of different types from a single output." However, this improperly defines the problem in terms of the solution. Defining the problem in terms of its solution reveals improper hindsight in the selection of the prior art relevant to obviousness. *Monarch Knitting Mach. Corp. v. Sulzer Morat GmbH*, 139 F.3d 877, 45 USPQ2d 1977, 1981-82 (Fed Cir. 1998). The subject application, in fact, identifies a problem in the conventional art and provides the solution to that problem. In particular, the subject invention notes that conventional raster engines and video controllers require manual rerouting of signal connects to interface different display formats. The present invention,

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therefore, provides *universal connectivity* through a single output *via* novel signal translation employing a pixel shift logic system. See page 9, lines 25-31. Neither reference is concerned with a *single output* supporting universal connectivity amongst both CRTs and LCDs. Accordingly, by introducing the solution into the problem facing the inventor at the time of conception, the Examiner has adopted a skewed view of the scope and content of the prior art. This evinces improper use of hindsight in selecting the prior art reference in which the invention taught is used against its teacher. Accordingly, the Examiner sidestepped the appropriate question of whether the reference in fact provides *proper* suggestion or motivation to be combined with Tjandrasuwita – which it does not as discussed *supra*.

In view of the above, it is readily apparent that the Examiner has failed to establish a *prima facie* case of obviousness as neither Tjandrasuwita nor Reddy, *et al.* alone or in combination teach or suggest all limitations recited by independent claims 1 and 22. Furthermore, even if the limitations were taught by the union of cited references, there is not proper motivation to combine the references as suggested. Accordingly, claims 1 and 22 (as well as claims 2-14 and 23-29 depending respectively therefrom) are allowable and withdrawal of this rejection is respectfully requested.

Finally, it should be noted that the subject matter of the dependent claims herein provide additional bases for patentability above and beyond those of the independent claims from which they depend. For example, claims 28 and 29 (depending from claims 1 and 22 respectively) recite a logic device or parallel output means comprising two or more of a pixel shifting logic system, a YCrCb encoder, and a DAC. The Examiner asserts that multiplexer 208 from Tjandrasuwita teaches these limitations. However, the multiplexer 208 receives input from a TFT module 206 and a STN module 207 and therefore merely teaches selecting between active and passive matrix display. Hence, claims 28 and 29 should be allowable as all their limitations are not disclosed, taught, or suggested by the cited references. Accordingly, withdrawal of this rejection and allowance of claims 28 and 29 is requested.

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CONCLUSION

The present application is believed to be condition for allowance in view of the above comments. A prompt action to such end is earnestly solicited.

In the event any fees are due in connection with this document, the Commissioner is authorized to charge those fees to Deposit Account No. 50-1063.

Should the Examiner believe a telephone interview would be helpful to expedite favorable prosecution, the Examiner is invited to contact applicants' undersigned representative at the telephone number listed below.

Respectfully submitted,

AMIN & TUROCY, LLP



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Himanshu S. Arora  
Reg. No. 40,894

AMIN & TUROCY, LLP  
24<sup>TH</sup> Floor, National City Center  
1900 E. 9<sup>TH</sup> Street  
Cleveland, Ohio 44114  
Telephone: (216) 696-8730  
Facsimile: (216) 696-8731